Attachment 2 Review eligibility criteria

Table S 1 Inclusion and exclusion criteria using population, intervention, comparator, and outcome(s) (PICO) and other relevant criteria

Element	Inclusion	Exclusion
Population	Single-use medical devices, or purpose-built components thereof, contaminated from clinical use on human patients or artificially using human bacteria, viruses, etc.	Single-use medical devices contaminated from clinical use in non-human patients.
Intervention	A newly developed or established reprocessing method which involved device cleaning, disinfection, sterilisation, or related procedures, and device function and safety testing. Contaminated devices were exposed to one or more reprocessing cycles.	Reprocessing of reusable medical devices. Reprocessing of single-use components of otherwise reusable medical devices. It is unclear whether the reprocessing involved both the cleaning and related procedures as well as the function and safety testing aspects. For studies with multiple reuse cycles, devices reused on the same person (i.e. single-person reuse).
Comparator	Unused (i.e. new) SUDs. Manufacturer specifications for device sterilisation, safety, and functioning.	Reusable device alternative of a single-use medical device (e.g. the same device made from different materials). Contaminated devices which have not yet been reprocessed.
Outcome(s)	Device function and safety: Device sterility, device degradation, device failure, device corrosion, or other device-specific reprocessing process-related function and safety outcomes. Environmental impact: Environmental and human health impacts. Environmental impacts include carbon emissions for new device production and reprocessing, disposal waste volume, and other environmental impacts. Human health impacts include human health effects of air pollution, human health effects of chemical exposure e.g., cancer, breathing issues. Cost: First use device purchase cost, SUD reprocessing cost, SUD disposal cost, and costs associated with safety and environmental outcomes.	Does not provide data for all reprocessing components (i.e. device cleaning/sterilisation and device safety and functioning testing).

Attachment to: McGrath N, Waldron C, Farragher A, Walsh C, Polisena J. Safety, cost and environmental impact of reprocessing high risk single-use medical devices: a systematic review and meta-analysis. GMS Hyg Infect Control. 2025;20:Doc25. DOI: 10.3205/dgkh000554

Supplemental file 2 Review eligibility criteria

Table S 1 Inclusion and exclusion criteria using population, intervention, comparator, and outcome(s) (PICO) and other relevant criteria

Element	Inclusion	Exclusion
Population	Single-use medical devices, or purpose-built components thereof, contaminated from clinical use on human patients or artificially using human bacteria, viruses, etc.	Single-use medical devices contaminated from clinical use in non-human patients.
Intervention	A newly developed or established reprocessing method which involved device cleaning, disinfection, sterilisation, or related procedures, and device function and safety testing. Contaminated devices were exposed to one or more reprocessing cycles.	Reprocessing of reusable medical devices. Reprocessing of single-use components of otherwise reusable medical devices. It is unclear whether the reprocessing involved both the cleaning and related procedures as well as the function and safety testing aspects. For studies with multiple reuse cycles, devices reused on the same person (i.e. single-person reuse).
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Element	Inclusion	Exclusion
Study design	In vitro primary studies.	Conference abstracts Qualitative studies Case reports or series Ecological studies Studies which do not describe a methodology (e.g. literature reviews) Systematic reviews
Language	English, German.	Any other language.

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